

under the pool. Tak than eftsones the altitude of *A* from the orisonte, and note as wel his secounde altitude as his firste altitude; and whan that this is don, rikne howmany degrees that the firste altitude of *A* exceedeth his secounde altitude, and tak half thilke porcioun that is exceded, and adde it to his secounde altitude; & tak ther the elevacioun of thy pool, and eke the latitude of thy region. for these two ben of a nombre; this is to seyn, as manye degrees as thy pool is elevat, so michel is the latitude of the region. Ensample as thus: par aventure, the altitude of *A* in the evening is 56 degrees of heyghte, Than wol his secounde altitude or the dawning be 48; that is 8 lasse than 56, that was his firste altitude at even. Take thanne the half of 8, & adde it to 48, that was his secounde altitude, & than hastow 52. Now hastow the heyghte of thy pol, and the latitude of the region. But understood wel, that to prove this conclusioun & many another fair conclusioun, thou most have a plomet hanging on a lyne beyer than thin heved on a perche; & thilke lyne mot hange evene perpendicular bytwix the pool & thyn eye; & thanne shaltow seen yif *A* sitte evene over the pool and over *f* at evene; and also yif *f* sitte evene over the pool and over *A* or day. And for more declaracioun, lo here thy figure.

24. Another conclusioun to prove the heyghte of the pool artik fro the orisonte.
(*Alia conclusio ad probandum altitudinem de polo artico ab orizonte.*)

UN anysterre fixe that nevere dissendeth under the orisonte in thilke region, and considere his heyest altitude & his lowest altitude fro the orisonte; and make a nombre of bothe these altitudes. Tak thanne and abate half that nombre, and tak ther the elevacioun of the pol artik in that same region. And for more declaracioun, lo here thy figure.

25. Another conclusioun to prove the latitude of the region, &c.
(*Alia conclusio ad probandum latitudinem regionis.*)

UNDERSTOND wel that the latitude of any place in a region is verreyly the space bytwix the senith of hem that dwellen there & the equinoxial cerkle, north or southe, taking the mesure in the meridional lyne, as sheweth in the almikanteras of thyn Astrolabe. And thilke space is as moche as the pool artik is hey in the same place fro the orisonte. And than is the depressioun of the pol antartik, that is to seyn, than is the pol antartik bynethe the orisonte, the same

quantite of space, neither more ne lasse. Thanne, yif thou desire to knowe this latitude of the region, tak the altitude of the sonne in the middel of the day, whan the bra; (for thanne moeveth the sonne in the lyne equinoxial); and abate the nombre of that same sonnes altitude out of 90, and that levethe the latitude of the region. Thus: I suppose that the sonne is thilke day at noon 38 degrees and 10 minutes of heyghte. Abate thanne these degrees and minutes out of 90; so levethe there 51 degrees & 50 minutes, the latitude. I sey nat this but for ensample; for wel I wot the latitude of Oxenforde is certein minutes less, as I mighte prove. Now yif so be that thee semeth to long a taryinge, to abyde til that the sonne be in the hevedes of Aries or of Libra, thanne waite whan the sonne is in any other degree of the zodiak, & considere the degree of his declinacion fro the equinoxial lyne; & yif it so be that the sonnes declinacion be northward fro the equinoxial, abate thanne fro the sonnes altitude at noon the nombre of his declinacion, and thanne hastow the heyghte of the hevedes of Aries & Libra. As thus: my sonne is, par aventure, in the firste degree of Leoun, 58 degrees and 10 minutes of heyghte at noon and his declinacion is almost 20 degrees northward fro the equinoxial; abate thanne thilke 20 degrees of declinacion out of the altitude at noon, than levethe thee 38 degrees and odder minutes; lo ther the heved of Aries or Libra, & thyn equinoxial in that region. Also yif so be that the sonnes declinacion be southward fro the equinoxial, adde thanne thilke declinacion to the altitude of the sonne at noon; and tak ther the hevedes of Aries and Libra, and thyn equinoxial. Abate thanne the heyghte of the equinoxial out of 90 degrees, and thanne levethe there the distans of the pole, 51 degrees & 50 minutes, of that region fro the equinoxial. Or elles, yif thee lest, take the heyest altitude fro the equinoxial of anysterre fixe that thou knowest, and tak his nethere elongacioun lengthing fro the same equinoxial lyne, and wirke in the maner forseid. And for more declaracioun, lo here thy figure.

26. Declaracioun of the assensioun of signes, &c.

(*Declaracio de ascensione signorum.*)

UN excellence of the spere solide, amonges other noble conclusiouns, sheweth manifeste the diverse assenciouns of signes in diverse places, as wel in the righte cercle as

in the embelif cercle. These auctours wryt on that thilke signe is cleped of right assencioun, with which more part of the cercle equinoxial and lasse part of the zodiak ascendeth; & thilke signe ascendeth embelif, with which lasse part of the equinoxial and more part of the zodiak ascendeth. And more they seyn, that in thilke cunferther where as the senith of hem that dwelten there is in the equinoxial lyne, & her orisonte passing by the poles of this worlde, thilke folke han this right cercle and the right orisonte; and evermo the arch of the day and the arch of the night is ther ylike long, and the sonne twyes every year passinge thorow the senith of her heved; and two someres & two wintres in a year han this forseide poeple. And the almikanteras in her Astrolabes ben streighte as a lyne, so as sheweth in this figure. The utilite to knowe the assenciouns in the righte cercle is this: truste wel that by mediacioun of thilke assenciouns these astrologiens, by hir tables & hir instrumentz, knowen verreyly the assencioun of every degree and minut in al the zodiak, as shal be shewed. And nota, that this forseide righte orisonte, that is cleped orison rectum, divydethe the equinoxial into right angles; and the embelif orisonte, wheras the pol is enhaused upon the orisonte, overkerweth the equinoxial in embelif angles, as sheweth in the figure. And for the more declaracioun, lo here the figure.

27. This is the conclusioun to knowe the assenciouns of signes in the right cercle, that is, circulus directus, &c.

(*Ad cognoscendum ascensiones signorum in recto circulo, qui vocatur circulus directus.*)

UN THE HEVED of what signe thee liste to knowe his assending in the right cercle upon the lyne meridional; and waite wher thyn almury toucheth the bordure, and set ther a prikke. Turne thanne thyriet westward til that the ende of the forseide signe sitte upon the meridional lyne; and eftsones waite wher thyn almury toucheth the bordure, and set ther another prikke. Rikne thanne the nombre of degrees in the bordure bytwix bothe prikkes, & tak the assencioun of the signe in the right cercle. And thus maystow wyrke with every porcioun of thy zodiak, &c. And for the more declaracioun, lo here thy figure.

28. To knowe the assenciouns of signes in the embelif cercle in every region, I mene, in circulo obliquo.

(*Ad cognoscendum ascensiones signorum in circulo obliquo, in omni regione.*)

SET the heved of the signe which as thee liste to knowe his assencioun upon the est orisonte, & waite wher thyn almury toucheth the bordure, and set ther a prikke.

Turne thanne thyriet upward til that the ende of the same signe sitte upon the est orisonte, and waite eftsones wher as thyn almury toucheth the bordure, and set ther another prikke. Rikne thanne the nombre of degrees in the bordure bytwix bothe prikkes, & tak ther the assencioun of the signe in the embelif cercle. And understood wel, that alle signes in thy zodiak, fro the heved of Aries unto the ende of Virgo, ben cleped signes of the north fro the equinoxial; & these signes arysen bytwix the verrey est and the verrey north in oure orisonte generally for evere. And alle signes fro the heved of Libra unto the ende of Pisces ben cleped signes of the south fro the equinoxial; and these signes arysen evermo bytwix the verrey est and the verrey south in oure orisonte. Also every signe bytwix the heved of Capricorne unto the ende of Gemini arysen in oure orisonte in lasse than two houres equales; and these same signes, fro the heved of Capricorne unto the ende of Gemini, ben cleped Tortuos signes or Croked signes, for they arisen embelif on oure orisonte; and these crokede signes ben obedient to the signes that ben of right assencioun. These signes of right assencioun ben fro the heved of Cancer to the ende of Sagittare; and these signes arysen more upright, and they ben called eke sovereyn signes; & everich of hem arysen in more space than in two houres. Of which signes, Gemini obeyeth to Cancer; and Taurus to Leo; Aries to Virgo; Pisces to Libra; Aquarius to Scorpioun; and Capricorne to Sagittare. And thus evermo two signes, that ben ylyke fer fro the heved of Capricorne, obeyen everich of hem til other. And for more declaracioun, lo here the figure.

29. To knowe justly the foure quarters of the world, as est, west, north, and south.
(*Ad cognoscendum evidentur quatuor partes mundi, scilicet, orientem, austrum, aquilonem, et occidentem.*)

UNKE the altitude of thy sonne whan thee liste, and note wel the quarter of the world in which the sonne is for the tyme by the azimuth. Turne thanne thyn Astrolabe, and set the degree of the sonne in the almikanteras of his altitude, on thilke side that the sonne stant, as is the manere in taking of houres; and ley thy label on the degree of the sonne, and rikene how many degrees of